

1 CLAIMS

2 What is claimed is:

3 1. A payment processing system comprising:

4 a plurality of data communications devices adapted to transmit a plurality of
5 payment requests in connection with purchases, the data communications devices
6 configured to transmit the payment requests via respective communication channels,
7 wherein each payment request includes a merchant identification code and a set of
8 customer financial account data; and

9 a payment server arrangement adapted to receive the payment requests from the
10 data communications devices at the respective channels via a plurality of adapter modules
11 corresponding to each of the communication channels, each of the adapter modules having
12 a payment processing application configured to identify a financial institution
13 identification code associated with the merchant identification code and interface with a
14 data processing system of the financial institution consistent with a communications
15 protocol associated with the identified financial institution.

1 2. The payment processing system of claim 1, wherein at least one of the adapter
2 modules is configured to communicate data with a mobile communications device
3 consistent with an SSL/SET communications protocol thereby ensuring a high level of
4 security in communicating the customer financial account data.

1 3. The payment processing system of claim 3, further comprising a customer
2 financial server responsive to the mobile communications device and communicatively
3 coupled to the payment server, the customer-controlled server configured to transmit the
4 set of customer financial account data at the high level of security sought by the financial
5 institution.

1 4. The payment processing system of claim 1, wherein at least one of the adapter
2 modules is configured to communicate data with an POS terminal consistent with a POS
3 communications protocol thereby ensuring a high level of securing in communicating the
4 customer financial account data.

10013448-1

1 5. The payment processing system of claim 1, wherein at least one of the adapter
2 modules is configured to communicate data with a set top box arrangement consistent with
3 a cable network communications protocol thereby ensuring a high level of securing in
4 communicating the customer financial account data.

1 6. The payment processing system of claim 1, wherein at least one of the adapter
2 modules is configured to communicate data with a set top box arrangement consistent with
3 a satellite network communications protocol thereby ensuring a high level of securing in
4 communicating the customer financial account data.

1 7. The payment processing system of claim 1, wherein the payment server
2 arrangement further comprises a merchant/bank identification code database that
3 facilitates identifying the financial institution associated with the merchant identification
4 code.

1 8. The payment processing system of claim 1, further comprising a merchant
2 transactions database that includes historical information of payments processed by the
3 payment server arrangement, wherein the historical information is configurable for
4 demographic research.

1 9. The payment processing system of claim 2, wherein the at least one of the adapter
2 modules configured to communicate with a mobile communications device is also
3 configured to communicate data with a vending machine and a kiosk, thereby reducing the
4 number of adapter modules dedicated to the data communications devices.

1 10. A payment request processing arrangement configured and arranged for
2 communication with a plurality of data communication devices via respective
3 communications channels and communication with a plurality of data processing systems
4 located at a plurality of financial institutions, the arrangement comprising:

5 a payment server configured and arranged to be responsive to the plurality of data
6 communications devices, the payment server configured to receive a payment processing
7 request via a first channel at a first adapter module corresponding to a first data
8 communications device, wherein each payment request includes a merchant identification

10013448-1

9 code and a set of customer financial account data, the first adapter module having a first
10 payment processing application configured to identify a financial institution identification
11 code associated with the merchant identification code and interface with a data processing
12 system of the financial institution consistent with a communications protocol associated
13 with the identified financial institution.

1 11. The arrangement of claim 10, wherein the payment server arrangement further
2 comprises a merchant/bank identification code database that facilitates identifying the
3 financial institution associated with the merchant identification code.

1 12. The arrangement of claim 10, further comprising a merchant transactions database
2 that includes historical information of payments processed by the payment server
3 arrangement, wherein the historical information is configurable for demographic research.

1 13. The arrangement of claim 10, wherein at least one of the adapter modules is
2 configured to communicate data with a set top box arrangement consistent with a cable
3 network communications protocol thereby ensuring a high level of securing in
4 communicating the customer financial account data.

1 14. A system for processing payment requests from a plurality of data communications
2 devices, each payment request including a merchant identification code and a set of
3 customer financial data, the system comprising:

4 a plurality of adapter modules, each adapter module configured to interface with
5 one or more of the communications devices via a selected communications channel;

6 means for receiving payment requests from the data communications devices at the
7 adapter modules via the communications channels;

8 means for identifying the financial institutions associated with the merchant
9 identification codes, each financial institution having an associated data processing system
10 for processing payment requests; and

11 means for interfacing with the data processing systems of the financial institutions
12 consistent with payment protocols associated with the financial institutions.

1 15. A computer-implemented method for processing payment requests from a plurality
2 of data communications devices, each payment request including a merchant identification
3 code and a set of customer financial data, the method comprising:

4 providing a plurality of adapter modules, each adapter module configured to
5 interface with one or more of the communications devices via a selected communications
6 channel;

7 receiving payment requests from the data communications devices at the adapter
8 modules via the communications channels;

9 identifying the financial institutions associated with the merchant identification
10 codes, each financial institution having an associated data processing system for
11 processing payment requests; and

12 interfacing with the data processing systems of the financial institutions consistent
13 with payment protocols associated with the identified financial institutions.

1 16. The method of claim 15, after the interfacing step, further comprising:

2 processing payment at the identified financial institutions; and

3 storing the processed payment as data in a merchant transactions database.

1 17. The method of claim 15, wherein the step of identifying the financial institutions

2 includes providing a merchant/bank identification database that includes historical

3 information of processed payments, wherein the historical information is configurable for

4 demographic research.